

REMARKS

The application has been reviewed in light of the Office Action dated September 16, 2004. Claims 1-46 are pending, with claims 1, 5, 9, 12, 15, 20, 23, 28, 31, 35 and 39 being in independent form.

The drawings were objected to as having informalities. The Office Action states that proposed drawing corrections or corrected drawings are required in reply to the Office Action to avoid abandonment of the application.

A replacement sheet of corrected drawing for Fig. 2 is attached hereto as **Exhibit A**, and replaces, Figure 2 of the original sheets of drawings.

Withdrawal of the objection to the drawings is respectfully requested.

Claims 17 and 25 were objected to as having informalities. The Office Action states that use of the term “and” in series should be replaced with the term “or”.

Applicant respectfully points out that each of claims 17 and 25 recites “at least one of ..., and ...” The conjunctive “and” is properly used since it is preceded by the term “at least one of”.

Withdrawal of the objection to the claims is respectfully requested.

Claims 1-46 were rejected under 35 U.S.C. § 102(e) as purportedly anticipated by U.S. Patent No. 6,665,425 to Sampath et al.

Applicant has carefully considered the Examiner’s comments and the cited art, and respectfully submits that independent claims 1, 5, 9, 12, 15, 20, 23, 28, 31, 35 and 39 are patentable over the cited art, for at least the following reasons.

This application relates to monitoring status of consumable products (such as toner, ink, etc.) and maintenance components in communications terminal apparatuses and image forming apparatuses (such as copying machines, facsimile machines, printers, multi-function devices,

etc.). Conventionally, said monitoring is performed manually by a user, and when a component fails or a consumable product is exhausted or is about to be exhausted, the user places a call to a maintenance center requesting repair of the component or replenishment of the consumable product.

Applicant devised tools for automating such tasks, including (a) a detector adapted to detect a status of usage of a consumable product used in the apparatus and supplied by a service depot, and a controller configured to send a request for supplying the consumable product to a manager using an electronic communications address of the manager when the detector detects that the consumable product is nearly ended and a report for reporting a completion of supplying the consumable product on the apparatus when the detector detects that the consumable product is refilled (for example, as described in claim 1), and (b) a detector adapted to detect an event indicative of a defect in a maintenance component used in the apparatus, and a controller configured to send a request for repair service to the manager and the service depot using the respectively registered electronic communications addresses of the manager and the service depot, when the detector detects the defect event, and send a report for reporting a completion of the repair service on the apparatus when the detector detects no defect of the maintenance component (for example, as described in claim 5).

Sampath, as understood by Applicant, is directed to automated diagnosis and remediation of image quality in a document processing system. According to Sampath, a diagnostic inference engine is provided and invoked by the user when the user is not satisfied with the system's performance. The diagnostic inference engine applies a set of rules to analyze assorted system data which have been collected, and provide a diagnosis. If the diagnosis is incomplete, an image quality analysis module is invoked to analyze one or more test patterns which are printed and

scanned. The image quality analysis module identifies the presence of defects in the image and determines image quality parameters. The results from the image quality analysis module are fed to the diagnostic inference engine which refines its diagnosis based on the results. The system attempts to repair itself in order to correct any faults diagnosed by the inference engine. If the system is unable to correct itself, the user is notified in order to trigger the conventional process of requesting a visit from a service technician.

Applicant finds no teaching or suggestion in Sampath, however, of a detector adapted for detecting a status of usage of a consumable product used in the apparatus, and a controller configured to automatically send a request for replenishing the consumable product to a manager using an electronic communications address of the manager, when the detector detects that the consumable product is nearly exhausted, and sending a report for reporting a completion of supplying the consumable product on the apparatus when the detector detects that the consumable product is refilled, as described in independent claim 1.

In addition, although once invoked by a user, operator, or service center, the diagnostic inference engine of Sampath attempts to diagnose a fault in the system, Applicant does not find disclosure or suggestion by Sampath, however, of a detector adapted to detect an event indicative of a defect in a maintenance component used in the apparatus, and a controller configured to send a request for repair service to the manager and the service depot using the respectively registered electronic communications addresses of the manager and the service depot, when the detector detects the defect event, and send a report for reporting a completion of the repair service on the apparatus when the detector detects no defect of the maintenance component, as provided by independent claim 5.

Applicant simply does not find teaching or suggestion in Sampath of the automated

maintenance features of the claimed invention.

Independent claims 9, 12, 15, 20, 23, 28, 31, 35 and 39 are patentably distinct from the cited art for at least similar reasons.

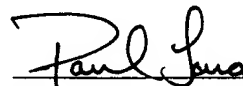
Accordingly, for at least the above-stated reasons, Applicant respectfully submits that independent claims 1, 5, 9, 12, 15, 20, 23, 28, 31, 35 and 39, and the claims depending therefrom, are patentable over the cited art.

If a petition for an extension of time is required to make this response timely, this paper should be considered to be such a petition. The Office is hereby authorized to charge any fees that may be required in connection with this amendment and to credit any overpayment to our Deposit Account No. 03-3125.

If a telephone interview could advance the prosecution of this application, the Examiner is respectfully requested to call the undersigned attorney.

Allowance of this application is respectfully requested.

Respectfully submitted,



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Amendments to the Drawings

A replacement sheet of corrected drawing for Fig. 2 is attached hereto as **Exhibit A**, and replaces, Figure 2 of the original sheets of drawings. The reference number 29 has been removed from Figure 2.

Attachment: replacement sheets of corrected drawing for Figure 2